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EXAMINER	
WILLIAMS, JEFFERY L	
ART UNIT	**PAPER NUMBER**
2137	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/084,596	GULICK, DALE E.	
	Examiner	Art Unit	
	Jeffery Williams	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *51-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *51-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 February 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the communication filed on 3/20/2007.

Claims 51 – 65 are pending.

All objections and rejections not set forth below have been withdrawn.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "receiving a request...over a bus external to the bridge from a source remote from the computer system" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification fails to provide proper antecedent basis for the recitations of "receiving a request...over a bus external to the bridge from a source remote from the computer system" [or substantially similar] as found within claims 51 – 65.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 51 – 65 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject

matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not pointed out where the amended claim is supported, nor does there appear to be a written description of the claim limitations in the application as filed (see above objection to the specification).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 61 – 65 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically, these claims recite instructions embodied within a signal (see for example – "transmission medium", applicant's disclosure pg. 29). As a signal encoded with descriptive material fails to falls within one of the four statutory categories of invention, these claims are rejected as nonstatutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 51, 52, 54, 56, 57, 59, 61, and 64 are rejected under 35 U.S.C. 102(e) as being anticipated by Heinrich et al. (Heinrich), U.S. Patent 6,199,167.

Regarding claim 51, Heinrich discloses:

receiving a request for an authentication at a microcontroller included in a bridge over a bus external to the bridge from a source remote from the computer system; requesting security data from a security device; receiving the security data from the security device, at the microcontroller (2:1-45; 3:51-59; fig. 1:110-120 – as shown, the source is external to the computer system).

evaluating the security data; and approving the authentication at the microcontroller responsive to the security data being evaluated as acceptable (3:51-59; fig. 1:110-120; 3:65-4:2).

Regarding claim 52, Heinrich discloses:

disapproving the authentication at the microcontroller responsive to the security data being evaluated as unacceptable (3:65-4:2).

Regarding claim 54, the combination of Heinrich discloses:

wherein requesting security data from a security device comprises requesting the security data from the security device over a direct connection between the security device and the microcontroller; and wherein receiving the security data from the security device, at the microcontroller, comprises receiving the security data from the security device over the direct connection to the microcontroller (fig. 3:204, 203).

Regarding claims 56, 57, 59, 61, and 64, they are the method steps and method implemented on computer readable medium claims corresponding to the method claims above, and are rejected, at least, for the same reasons.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 53, 55, 58, 60, 63, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinrich.

Regarding claims 55, 60, and 65, Heinrich discloses the submission of authentication data by the user and that the user input may comprise biometric data (fig.

1:120; 2:16-37). While Heinrich discloses evaluating user input for authentication, Heinrich does not contain an explicit statement that when the user input comprises *biometric information*, the *biometric information* is evaluated. However, it would have been obvious to one of ordinary skill in the art to recognize the need to evaluate the biometric information when the user, desiring authentication, submits biometric information. This would have been obvious as one of ordinary skill in the art would have been motivated by the ability to reason logically that whenever biometric information is submitted by a user desiring authentication, then this type of information should be evaluated.

Regarding claims 53, 58, and 63, Heinrich does not explicitly state *wherein evaluating the security data comprises requesting an indication of acceptability inside SMM*. However, Heinrich discloses that for purposes of security, systems operate within SMM (1:35-42; 4:3-28). Heinrich clearly enables for SMM to be apart of system operation and for his method of verification as an enhancement to existing security features.

Claims 51, 52, 54 – 57, 59 – 62, 64, and 65 are rejected under 35 U.S.C. 102(e) as being anticipated by Flyntz, "Multi-Level Secure Computer With Token-Based Access Control", U.S. Patent 6,389,542 in view of Angelo, "Method and Apparatus for Allowing Access to Secured computer Resources by Utilizing a Password and an External Encryption Algorithm", U.S. Patent 5,949,882.

Regarding claim 51, Flyntz discloses:

receiving a request for an authentication at a microcontroller, requesting security data from a security device; receiving the security data from the security device, at the microcontroller (Flyntz, col. 2, lines 52-56; col. 15, lines 5-20, 33-36, 53-55). Flyntz discloses that a user requests authentication by supplying security data to the microcontroller, which in turn processes such security data to evaluate acceptance.

evaluating the security data; and approving the authentication at the microcontroller responsive to the security data being evaluated as acceptable (Flyntz, col. 10, lines 33-40; col. 15, lines 21-65).

Flyntz discloses a microcontroller, serving to control the connection of the CPU to devices located on system buses (Flyntz, fig. 2; col. 5, line 61 – col. 6, line 25; col. 15, lines 21-32). The system of Flyntz allows for the provision of power to secure system portions after a positive indication of acceptability has been received (Flyntz, Abstract; col. 1, lines 55-63). The microcontroller receives a request for authentication via connection to a security device (Flyntz, fig. 2:31). Flyntz, however, does not disclose the microcontroller as *included in a bridge*.

Like Flyntz, Angelo discloses controlling circuitry to implement a secure power up procedure for providing power to system portions on system buses, upon permission for authorized users (Angelo, Abstract; col. 6, lines 44-50; col. 11, lines 17-45). Angelo specifically discloses that the controlling circuitry used to accomplish this procedure is included in the bridge, thus allowing the system to control the connection of the CPU to

devices located on system buses (Angelo, fig. 1-130; col. 5, lines 1-30). The inclusion of the above mentioned security features within the bridge allows for increased hardware security, as security data may be entered via a secure communication path to the bridge after a request for authentication has been received (Angelo, 2:39-43; 11:64-12:9).

It would have been obvious to one of ordinary skill in the art to employ the secure bridge implementation of Angelo for connecting devices on system buses along with the security microcontroller of Flyntz for connecting devices on system buses. This would have been obvious because one of ordinary skill in the art would have been motivated by the showing of prior art that the above mentioned security features need not be constructed as separate system components, but rather, may be feasibly included within the existing computer system's bridge, thereby allowing the secure connection of the CPU to devices located on buses (Angelo, fig. 2-130; col. 2, lines 39-43; 5:13-26; 10:33-54), as well as increased hardware security.

The combination of Flyntz and Angelo discloses the request being received from a bus external to the bridge from a source remote from the computer system (Flyntz, fig. 2, elem. 31; Angelo, fig. 1:130; 3:29-65 - as shown, the source is external to the computer system).

Regarding claim 52, the combination of Flyntz and Angelo discloses:

disapproving the authentication at the microcontroller responsive to the security data being evaluated as unacceptable (Flyntz, col. 2, lines 53-57; col. 10, lines 33-37; 15:21-65).

Regarding claim 53, the combination of Flyntz and Angelo discloses *wherein evaluating the security data comprises requesting an indication of acceptability inside SMM* (Angelo, Abstract; col. 6, lines 44-50; col. 5: 21-30; col. 11, lines 17-45).

Regarding claim 54, the combination of Flyntz and Angelo discloses:

wherein requesting security data from a security device comprises requesting the security data from the security device over a direct connection between the security device and the microcontroller; and wherein receiving the security data from the security device, at the microcontroller, comprises receiving the security data from the security device over the direct connection to the microcontroller (Flyntz, fig. 2, elem. 31, 32). The combination of Flyntz and Angelo discloses a direct connection between the security device and the microcontroller.

Regarding claim 55, the combination of Flyntz and Angelo discloses:

wherein requesting security data from a security device comprises requesting biometric data from a biometric device; wherein receiving the security data from the security device, at the microcontroller, comprises receiving the biometric data from the

biometric device, at the microcontroller (Flyntz, col. 2, lines 52-56; col. 15, lines 5-20, 33-36, 53-55; col. 6, lines 36-46).

wherein evaluating the security data comprises evaluating the biometric data; and wherein approving the authentication responsive to the security data being evaluated as acceptable comprises approving the authentication responsive to the biometric data being evaluated as acceptable (Flyntz, col. 2, lines 52-56; col. 15, lines 5-20, 33-36, 53-55; col. 6, lines 36-46; col. 10, lines 33-40).

Regarding claims 56 – 65, they are the method steps and method implemented on computer readable medium claims corresponding to the method claims above, and are rejected, at least, for the same reasons.

Response to Arguments

Applicant's arguments filed 8/24/07 have been fully considered but they are not persuasive.

Applicant argues or asserts primarily that:

(i) *"...data structures and computer programs which impart functionality when employed as a computer component"--is generally statutory when "recorded on a*

computer-readable medium". ...The rejections of claims 61-65 as non- statutory subject matter under 35 U.S.C. § 101 are therefore erroneous. Each of claims 61-65 recites statutory subject matter. (Remarks, pg. 7)

In response, the examiner respectfully notes that instructions embodied upon a signal would not be "*generally statutory*". The applicant fails to limit the claim scope to statutory subject material, thus claims 61 – 65 are rejected as not being statutory.

(ii) *The authentication request is not received over an external bus and from a source remote from the computer system. ... A user interfacing with the computer system via the keyboard is not remote with respect to the computer system, but rather directly interfacing with the computer system. ...Therefore Heinrich teaches away from authenticating remote requests.* (Remarks, pg. 8)

In response, the examiner respectfully notes that the applicant forms an unfounded assertion of equivalency between "not remote" and "directly interfacing". It is respectfully noted as lacking within the applicant's assertions, a rational basis for concluding that a source interfacing directly or indirectly would somehow qualify a source as being remote or not remote. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Furthermore, the examiner respectfully notes that the claims in question are rejected, not as being obvious in view of, but as being anticipated by the prior art. Therefore, the examiner does not find persuasive the applicant's argument that the prior art teaches away from authenticating remote requests.

(ii) *Taken as a whole, the combination of Flyntz and Angelo fails to teach or suggest receiving a request for an authentication at a microcontroller included in a bridge over a bus external to the bridge from a source remote from the computer system and approving the authentication at the microcontroller responsive to security data being evaluated as acceptable. Flyntz is not directed to remote authentication requests and Angelo fails to correct this defect.* (Remarks, pg. 8,9)

In response, the examiner notes that the combination shows "*a source remote from the computer system*" (see at least Angelo, 3:29-65). Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Specifically, though the applicant makes an assertion, the applicant fails to present a rational argument to distinguish the recitation of "remote" from the disclosure of the prior art.

Conclusion

Claims 51 – 65 are rejected.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

See Notice of References Cited.

A shortened statutory period for reply is set to expire **3** months (not less than 90 days) from the mailing date of this communication.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery Williams whose telephone number is (571) 272-7965. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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